



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,314	06/27/2001	Phillip B. Blankenship	KOCH.84166	2106

27910 7590 09/26/2003

STINSON MORRISON HECKER LLP
ATTN: PATENT GROUP
1201 WALNUT STREET, SUITE 2800
KANSAS CITY, MO 64106-2150

EXAMINER

FULLER, ERIC B

ART UNIT	PAPER NUMBER
----------	--------------

1762

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/893,314	BLANKENSHIP ET AL.	
	Examiner	Art Unit	
	Eric B Fuller	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-36 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>(3)</u> | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-18, drawn to a composition, classified in class 524, subclass 59.
- II. Claims 19-33 and newly added claims 34-36, drawn to a method, classified in class 427, subclass 138.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the composition may be used as a roofing composition.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Susan Wharton on June 27, 2003 a provisional election was made with traverse to prosecute the invention of Group II,

Art Unit: 1762

claims 19-33 and newly added claims 34-36. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-18 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-28 and 30-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helf (US 6,248,396 B1) in view of Walter (US 3,907,582) and Goodrich et al. (US 5,306,750).

Helf teaches a method of selecting an aggregate, selecting an asphalt, and selecting a polymer (column 2, lines 35-47), heating the asphalt to between about 150 and 200 degrees Celsius (column 7, lines 5-15), adding the polymer to the asphalt to form a binder, stirring the binder until said polymer is substantially dissolved, stirring the

Art Unit: 1762

binder until a substantially homogeneous binder is formed, mixing the binder with the aggregate to form an interlayer (column 7, lines 55-57), and spreading the interlayer on the roadway. Helf additionally teaches the addition of cross-linking agents (column 5, line 65) and the high viscosity of the binder reads on low shear blending conditions. Helf additionally teaches the overlay (column 8, lines 55-63). As the mixture may be used as an interlayer or a may be the top layer, this reads on allowing traffic to drive on the interlayer.

The reference fails to teach performing stability and fatigue tests. However, Walter teaches that a Hveem stability test is used to determine the stability of an asphalt road so that it meets highway specifications and the results are effected by the amount of asphalt in the mixture (column 2, lines 44-60). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize a Hveem stability test. By doing so, one is able to ensure that highway specifications are met. It would have been within the skill of one practicing in the art, through routine experimentation, to determine the amount of asphalt that is needed in order to achieve the maximum stability.

Additionally, Goodrich teaches that Flexural Beam Fatigue test is used to determine the fatigue life of an asphalt road the results are effected by the amount of polymer in the mixture (column 11, lines 60-65)). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize a Flexural Beam Fatigue test. By doing so, one is able to ensure a long fatigue life of the product. It would have been within the skill of one practicing in the art, through routine

Art Unit: 1762

experimentation, to determine the amount of polymer that is needed to achieve the maximum fatigue life.

As to claims 24, 25, 34, and 35, Goodrich also teaches to determine the shear modulus, strain tolerance, bending creep, and rotational viscosity such that a good quality product is achieved (examples). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to determine these attributes. By doing so, a good quality product is achieved.

As to claims 27, 28, and 30, Wilson teaches cooling between layers and forming an overcoat with a thickness of 1 inch (column 4-41). To use these values in the process taught by Helf would have been obvious at the time the invention was made to a person having ordinary skill in the art. By doing so, one would have a reasonable expectation of success, as both references pertain to coating roads with an overlay.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helf (US 6,248,396 B1) in view of Walter (US 3,907,582) and Goodrich et al. (US 5,306,750), as applied to claim 26 above, and further in view of McDonald (US 3,891,585).

The references mentioned above teach the limitations to claim 26, but fail to explicitly teach sweeping the roadway and sealing cracks prior to applying the interlayer. However, McDonald teaches to sweep the roadway and seal the cracks prior to forming an asphalt/polymer layer on it (column 9, lines 18-41). This is done so that underlying fatigue cracking is not reflected in the new layer (column 7, line 12). Therefore, it would have been obvious at the time the invention was made to a person

Art Unit: 1762


having ordinary skill in the art to sweep and seal the cracks in the roadway of Helf. By doing so, the underlying fatigue cracks are not reflected in the new layer.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B Fuller whose telephone number is (703) 308-6544. The examiner can normally be reached on Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck, can be reached at (703) 308-2333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



EBF



SHRIVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700